



# Launch Mission Execution Forecast

**Mission:** Falcon 9 GPS III-4

**Issued:** 1 Nov 20 / 0900L (1400Z)

**Valid:** 4 Nov 20 /1828 – 1844L (2328 – 2344Z)



**Forecast Discussion:** Partly cloudy skies will continue as a strong cold front moves through late tonight. Monday will bring blustery winds from the north, dropping off after sunset. On Tuesday, the strong high pressure over the northern Gulf States will move east into the Carolinas, making winds lighter and turning them easterly. On Wednesday, the tropical storm in the Caribbean will assist in tightening the pressure gradient, increasing the winds. This continued onshore flow will also bring an increase coastal stratocumulus clouds and the potential for a few embedded cumulus. The primary weather concerns for Wednesday evening are Liftoff Winds and the Cumulus Cloud Rule.

On Thursday, similar conditions are expected with gusty, onshore winds bringing increasing cloudiness over the Spaceport. The primary weather concerns remain Liftoff Winds and the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints							
	30%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Clouds				Upper-Level Wind Shear:	Low
			Type	Coverage	Base (ft)	Tops (ft)		
	Temp/Humidity:	75°F / 72%	Cumulus	Few	2,500	10,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'):	080° 25 - 30 mph	Stratocumulus	Broken	3,000	6,000	Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	40%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Isold Showers / 7 mi.	Clouds				Upper-Level Wind Shear:	Low
			Type	Coverage	Base (ft)	Tops (ft)		
	Temp/Humidity:	75°F / 72%	Cumulus	Scattered	2,500	12,000	Booster Recovery Weather:	Moderate
	Liftoff Winds (200'):	080° 25 - 30 mph	Stratocumulus	Broken	3,000	6,000	Solar Activity:	Low
<b>Note:</b> The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.								
Next Forecast Will Be Issued		2 Nov 2020						